

MO  
LI.Re  
2:St 1/2/  
996

MISSOURI STATE LIBRARY  
0 1907 0030015 4

MISSOURI STATE LIBRARY  
OCT 1 1996 5 53  
DEPOSITORY DOCUMENT

# OCCUPATIONAL STAFFING PATTERNS FOR STATE AND LOCAL GOVERNMENT AND EDUCATIONAL SERVICES

**State and Local Government**

Survey Period — May 1994

**Educational Services**

Survey Period — April 1994

Published: August 1996

Prepared by  
Missouri Department of Labor and Industrial Relations  
RESEARCH AND ANALYSIS SECTION  
Occupational Information Unit

**MISSOURI  
OCCUPATIONAL  
STAFFING PATTERNS  
FOR  
STATE AND LOCAL GOVERNMENT  
AND  
EDUCATIONAL SERVICES**

**State and Local Government**  
*Survey Period — May 1994*

**Educational Services**  
*Survey Period — April 1994*

The Occupational Employment Survey is conducted by the Research and Analysis Section of the Missouri Department of Labor and Industrial Relations, State of Missouri under contract to the U. S. Department of Labor's Bureau of Labor Statistics.

Published: August 1996

# TABLE OF CONTENTS

	<b>PAGE</b>
Introduction .....	1
Background .....	3
Occupational Staffing Patterns For —	
Educational Services .....	9
Elementary and Secondary Schools.....	9
Colleges, Universities, Professional Schools, And Junior Colleges .....	9
Correspondence and Vocational Schools .....	10
Schools and Educational Services, Not Elsewhere Classified .....	10
State and Local Government .....	11
State Government .....	11
Local Government .....	11
Appendix A - Definitions of Selected Occupations .....	19
Appendix B - Methodology .....	21
Appendix C - Limitations of the Data.....	23
Appendix D - Other Publications .....	25

# INTRODUCTION

This report presents occupational staffing patterns for State and Local Government and Educational Services in Missouri. Excluded are Hospital and Health Service Agencies which are surveyed in the Hospital industry. May 1994, was the reference period for the survey of Government and April 1994, was the Educational Services reference period.

The SIC's used for State and Local Government are pseudo SIC's and are in no way related to any other SIC. The survey for Educational Services includes colleges, universities and public elementary and secondary schools. Privately owned schools are excluded from this survey.

The purpose of this report is to present employment by occupation within industry. By identifying trends, changes, and needs in occupations, educational and training programs can be developed to supply future manpower demands. The data was collected by mail and by personal contact with employers doing business within Missouri. Detailed information concerning data collection and methods used to arrive at the published product can be found in the Methodology, Appendix B.

# BACKGROUND

The Occupational Employment Statistics (OES) Program collects and disseminates occupational employment by industry at the national and state levels. Prior to the OES program, only limited data was available from various public and private sources. Most information came from the U. S. Bureau of the Census; various government licensing agencies; labor unions; professional associations; and state employment agencies.

Missouri was one of the states which began the pilot OES program in 1970. The actual program started in 1971 with a survey of the manufacturing industry.

The OES program surveys industries (with certain exceptions) on a three-year cycle. For example:

**Year One** - Ag Services (Starting in 1992), Manufacturing and Hospitals.

**Year Two** - Mining; Construction; Finance, Insurance and Real Estate; and Services (excluding Educational Services).

**Year Three** - Transportation, Communication and Public Utilities; Trade; Educational Services; and State and Local Government.

The exceptions are:

1. The Agriculture; Forestry; and Fishing, Hunting and Trapping industries are not surveyed, nor are private elementary and secondary schools and churches.
2. Federal occupational data is provided from the Central Personnel Data System maintained by the Office of Personnel Management.

**NOTE:** *Military personnel and those persons who are self-employed, and Private Households workers are not included in any of the surveys.*

In the beginning, the OES Program in Missouri was a joint effort between the Bureau of Labor Statistics (BLS); Employment and Training Administration (ETA); and the State of Missouri. BLS was responsible for the technical development of the program and technical assistance to the states. ETA was responsible for the funding and administration of the program. Missouri collected and disseminated the OES data for the state.

A major change in the OES Program occurred in 1983. As of October 1, 1983, ETA was no longer involved. BLS contracted with Missouri to conduct the OES program in the state. Under the contract, BLS provides the funding, technical development and technical assistance to the states. Missouri collects and disseminates the OES data.

The most recent staffing pattern publications for Missouri are:

<u>Name</u>	<u>Date Published</u>	<u>Time Period Covered</u>
Trade	August 1996	June 1994
Transportation, Communications, & Public Utilities	August 1996	April, May, June 1994
Federal Government	January 1996	March 1994
State & Local Government & Educational Services*	August 1996	April, May 1994
Hospitals	November 1993	April 1992
Manufacturing	November 1993	April, May, June 1992
Selected Nonmanufacturing	June 1995	April, May, June 1993

\* June 1986, is the first time that State and Local Government and Educational Services have been combined.

Copies of these publications can be obtained by sending a request to:

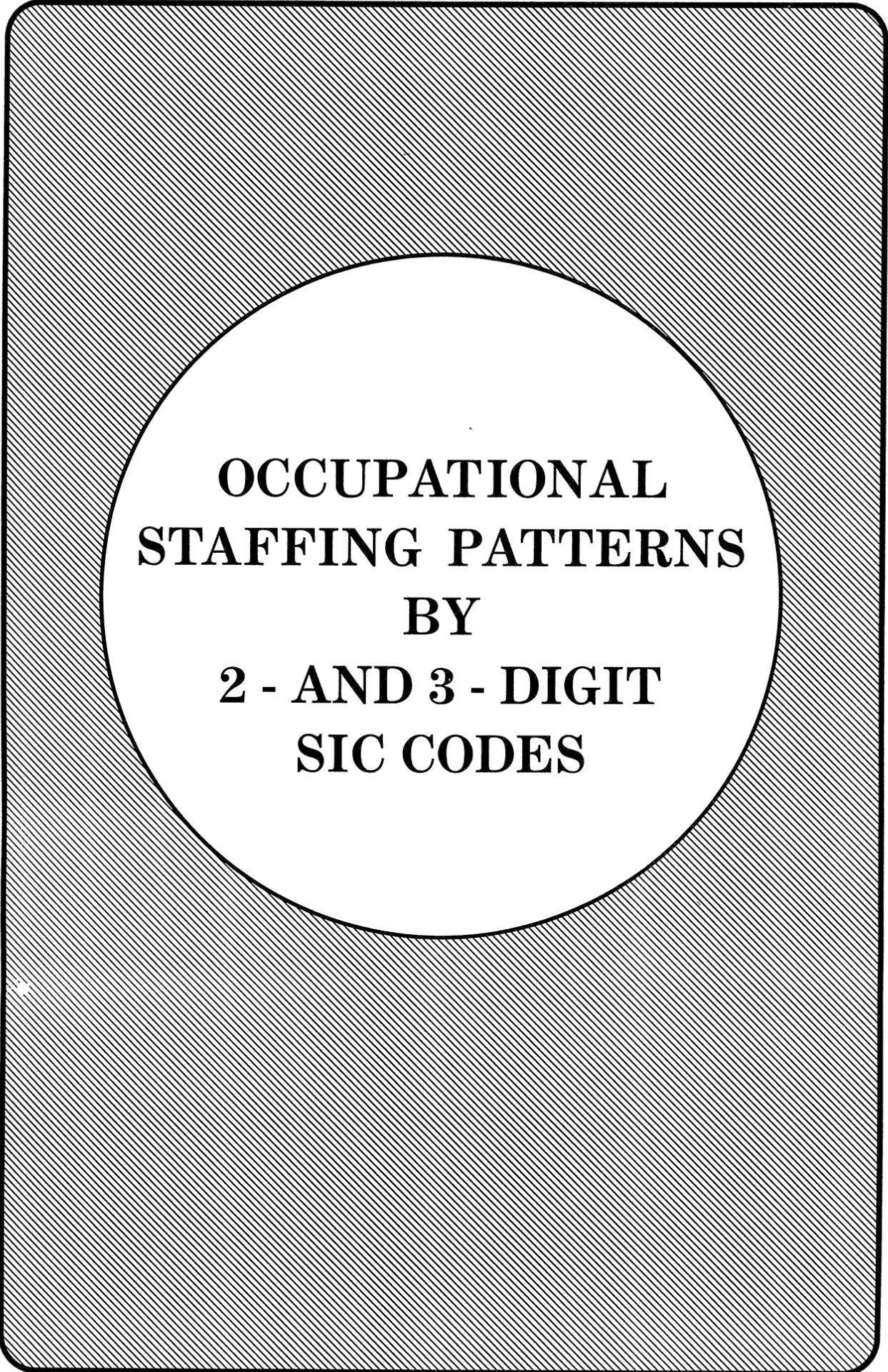
Missouri Department of Labor and Industrial Relations  
Attn: Research and Analysis Section  
P.O. Box 59  
Jefferson City, MO 65104-0059

## NOTES ON THE TABLES

Estimates have not been published for all of the industries surveyed. In general, data were not published at the 3-digit SIC level for industries employing less than 700 persons; or which had an employment response rate of less than 65 percent. Data were also not published on the 2-digit level for industries which had an employment response rate of less than 52 percent.

If one or two firms were dominant in an industry and one or both did not give us permission to publish their data, no figures for that industry were published.

An occupational estimate was not published if only one or two firms in the industry reported employment in the occupation. Also, an estimate was not published if the relative error for the estimate was 50 percent or greater or if the total number in the occupation was less than ten.



**OCCUPATIONAL  
STAFFING PATTERNS  
BY  
2 - AND 3 - DIGIT  
SIC CODES**

**SIC: 82 EDUCATIONAL SERVICES**

Benchmark Employment: 177,880

Total Number of Respondents: 135

Reference Date: April 12, 1994

Occupation		Employment	Per. of Total Employ.	Relative Error (in %)	Est. Reporting Occ. (%)	Mean Wage (\$)	Median Wage (\$)
TOTAL .....	000000	177,880	100.00	N.A.	N.A.	12.60	10.60
MANAGERIAL & ADMINISTRATIVE .....	100003	8,060	4.53	N.A.	N.A.	22.50	21.60
PROFESSIONAL/PARAPROFESSIONAL & TECHNICAL OCCUPATIONS.....	200003	113,780	63.96	N.A.	N.A.	14.70	13.00
RESEARCH AND DEVELOPMENT							
PROFESSIONAL/PARAPROFESSIONAL & TECHNICAL OCCUPATIONS .....	200005	30	0.02	N.A.	N.A.	N.A.	N.A.
SALES & RELATED OCCUPATIONS.....	400003	560	0.31	N.A.	N.A.	8.50	7.30
CLERICAL & ADMINISTRATIVE							
SUPPORT.....	500003	21,650	12.17	N.A.	N.A.	7.40	7.20
SERVICE OCCUPATIONS .....	600003	20,740	11.66	N.A.	N.A.	6.50	5.80
AGRICULTURAL, FORESTRY,							
FISHING & RELATED .....	700003	280	0.16	N.A.	N.A.	8.80	9.30
PRODUCT/CONSTRUCT/OPERATE							
MAINTENANCE/MATERIAL HANDLING...	800003	12,810	7.20	N.A.	N.A.	7.30	4.90

**SIC: 821 ELEM. & SECONDARY SCHOOLS**

Benchmark Employment: 127,390

Total Number of Respondents: 38

Reference Date: April 12, 1994

Occupation		Employment	Per. of Total Employ.	Relative Error (in %)	Est. Reporting Occ. (%)	Mean Wage (\$)	Median Wage (\$)
TOTAL .....	000000	127,400	100.00	N.A.	N.A.	10.90	9.90
MANAGERIAL & ADMINISTRATIVE .....	100003	4,460	3.50	N.A.	N.A.	21.80	21.90
PROFESSIONAL/PARAPROFESSIONAL							
& TECHNICAL OCCUPATIONS .....	200003	81,370	63.87	N.A.	N.A.	12.50	12.30
SALES & RELATED OCCUPATIONS.....	400003	200	0.16	N.A.	N.A.	5.50	5.30
CLERICAL & ADMIN SUPPORT .....	500003	12,990	10.20	N.A.	N.A.	6.60	6.00
SERVICE OCCUPATIONS .....	600003	17,510	13.74	N.A.	N.A.	6.30	5.60
PRODUCT/CONSTRUCT/OPERATE							
MAINT./MATERIAL HANDLING .....	800003	10,870	8.53	N.A.	N.A.	6.70	4.80

**SIC: 822 COLLEGES & UNIVERSITIES**

Benchmark Employment: 46,450

Total Number of Respondents: 48

Reference Date: April 12, 1994

Occupation		Employment	Per. of Total Employ.	Relative Error (in %)	Est. Reporting Occ. (%)	Mean Wage (\$)	Median Wage (\$)
TOTAL .....	000000	46,440	100.00	N.A.	N.A.	17.50	12.90
MANAGERIAL & ADMINISTRATIVE .....	100003	3,160	6.80	N.A.	N.A.	23.80	21.70
PROFESSIONAL/PARAPROFESSIONAL							
& TECHNICAL OCCUPATIONS .....	200003	29,760	64.08	N.A.	N.A.	20.80	15.90
RESEARCH AND DEVELOPMENT							
PROFESSIONAL/PARAPROFESSIONAL							
& TECHNICAL OCCUPATIONS .....	200005	30	0.06	N.A.	N.A.	N.A.	N.A.

N.A. - not available or not calculated.

Division total includes all occupations but only occupations passing confidentiality are shown.

**SIC: 822 COLLEGE & UNIVERSITIES**

Benchmark Employment: 46,450

Total Number of Respondents: 48

Reference Date: April 12, 1994

Occupation		Employment	Per. of Total Employ.	Relative Error (in %)	Est. Reporting Occ. (%)	Mean Wage (\$)	Median Wage (\$)
SALES & RELATED OCCUPATIONS.....	400003	260	0.56	N.A.	N.A.	9.40	9.00
CLERICAL & ADMIN SUPPORT .....	500003	7,970	17.16	N.A.	N.A.	8.50	8.10
SERVICE OCCUPATIONS .....	600003	3,130	6.74	N.A.	N.A.	7.70	7.50
AGRICULTURAL, FORESTRY, FISHING & RELATED .....	700003	280	0.60	N.A.	N.A.	8.80	9.30
PRODUCT/CONSTRUCT/OPERATE MAINTENANCE/MATERIAL HANDLING...	800003	1,880	4.05	N.A.	N.A.	11.00	10.80

**SIC: 824 CORRESPONDENCE & VOC. SCHOOLS**

Benchmark Employment: 2,200

Total Number of Respondents: 15

Reference Date: April 12, 1994

Occupation		Employment	Per. of Total Employ.	Relative Error (in %)	Est. Reporting Occ. (%)	Mean Wage (\$)	Median Wage (\$)
TOTAL .....	000000	2,220	100.00	N.A.	N.A.	13.00	11.70
MANAGERIAL & ADMINISTRATIVE .....	100003	220	9.91	N.A.	N.A.	19.60	16.10
PROFESSIONAL/PARAPROFESSIONAL & TECHNICAL OCCUPATIONS .....	200003	1,450	65.32	N.A.	N.A.	13.60	13.00
SALES & RELATED OCCUPATIONS.....	400003	90	4.05	N.A.	N.A.	11.70	10.60
CLERICAL & ADMIN SUPPORT .....	500003	390	17.57	N.A.	N.A.	8.40	8.10
SERVICE OCCUPATIONS .....	600003	60	2.70	N.A.	N.A.	7.50	7.20
PRODUCT/CONSTRUCT/OPERATE MAINTENANCE/MATERIAL HANDLING...	800003	10	0.45	N.A.	N.A.	16.10	17.30

**SIC: 829 SCHOOLS & EDUCATIONAL SERVICES, NEC**

Benchmark Employment: 1,710

Total Number of Respondents: 29

Reference Date: April 12, 1994

Occupation		Employment	Per. of Total Employ.	Relative Error (in %)	Est. Reporting Occ. (%)	Mean Wage (\$)	Median Wage (\$)
TOTAL .....	000000	1,720	100.00	N.A.	N.A.	12.60	11.00
MANAGERIAL & ADMINISTRATIVE .....	100003	210	12.21	N.A.	N.A.	20.40	16.80
PROFESSIONAL/PARAPROFESSIONAL & TECHNICAL OCCUPATIONS .....	200003	1,140	66.28	N.A.	N.A.	12.50	11.90
SALES & RELATED OCCUPATIONS.....	400003	10	0.58	N.A.	N.A.	24.60	23.50
CLERICAL & ADMIN SUPPORT .....	500003	270	15.70	N.A.	N.A.	8.10	7.90
SERVICE OCCUPATIONS .....	600003	30	1.74	N.A.	N.A.	7.50	6.80
PRODUCT/CONSTRUCT/OPERATE MAINTENANCE/MATERIAL HANDLING...	800003	60	3.49	N.A.	N.A.	10.20	10.20

N.A. - not available or not calculated.

Division total includes all occupations but only occupations passing confidentiality are shown.

**SIC: 90 STATE AND LOCAL GOVERNMENT**

Benchmark Employment: 128,260  
Reference Date: May 12, 1994

Total Number of Respondents: 206

Occupation		Employment	Per. of Total Employ.	Relative Error (in %)	Est. Reporting Occ. (%)	Mean Wage (\$)	Median Wage (\$)
TOTAL .....	000000	128,270	100.00	N.A.	N.A.	11.90	10.70
MANAGERIAL & ADMINISTRATIVE .....	100003	8,070	6.29	N.A.	N.A.	17.90	17.70
PROFESSIONAL/PARAPROFESSIONAL & TECHNICAL OCCUPATIONS .....	200003	35,380	27.58	N.A.	N.A.	13.70	13.00
SALES & RELATED OCCUPATIONS .....	400003	570	0.44	N.A.	N.A.	8.20	6.30
CLERICAL & ADMIN SUPPORT .....	500003	27,420	21.38	N.A.	N.A.	9.30	8.70
SERVICE OCCUPATIONS .....	600003	35,510	27.68	N.A.	N.A.	11.30	10.00
AGRICULTURAL, FORESTRY, FISHING & RELATED .....	700003	1,360	1.06	N.A.	N.A.	11.90	11.00
PRODUCT/CONSTRUCT/OPERATE MAINTENANCE/MATERIAL HANDLING...	800003	19,960	15.56	N.A.	N.A.	11.00	10.60

**SIC: 902 STATE GOVERNMENT**

Benchmark Employment: 47,690  
Reference Date: May 12, 1994

Total Number of Respondents: 49

Occupation		Employment	Per. of Total Employ.	Relative Error (in %)	Est. Reporting Occ. (%)	Mean Wage (\$)	Median Wage (\$)
TOTAL .....	000000	47,700	100.00	N.A.	N.A.	10.40	9.10
MANAGERIAL & ADMINISTRATIVE .....	100003	2,140	4.49	N.A.	N.A.	18.80	18.20
PROFESSIONAL/PARAPROFESSIONAL & TECHNICAL OCCUPATIONS .....	200003	16,920	35.47	N.A.	N.A.	13.30	11.80
SALES & RELATED OCCUPATIONS .....	400003	340	0.71	N.A.	N.A.	8.50	8.00
CLERICAL & ADMIN SUPPORT .....	500003	8,670	18.18	N.A.	N.A.	8.80	8.40
SERVICE OCCUPATIONS .....	600003	16,910	35.45	N.A.	N.A.	7.20	6.30
AGRICULTURAL, FORESTRY, FISHING & RELATED .....	700003	10	0.02	N.A.	N.A.	10.50	10.50
PRODUCT/CONSTRUCT/OPERATE MAINTENANCE/MATERIAL HANDLING...	800003	2,710	5.68	N.A.	N.A.	11.40	10.80

**SIC: 903 LOCAL GOVERNMENT**

Benchmark Employment: 80,570  
Reference Date: May 12, 1994

Total Number of Respondents: 79

Occupation		Employment	Per. of Total Employ.	Relative Error (in %)	Est. Reporting Occ. (%)	Mean Wage (\$)	Median Wage (\$)
TOTAL .....	000000	80,550	100.00	N.A.	N.A.	11.80	10.70
MANAGERIAL & ADMINISTRATIVE .....	100003	5,920	7.35	N.A.	N.A.	16.60	16.40
FINANCIAL MANAGERS .....	130023	290	0.36	18.56	51.90	17.00	15.30
PERSONNEL, TRAINING & LABOR RELATIONS MANAGERS .....	130053	90	0.11	31.88	29.11	18.70	17.30
PURCHASING MANAGERS .....	130083	10	0.01	0.00	13.92	21.10	20.80
MARKETING/ADVERTISING/PUBLIC RELATIONS MANAGERS .....	130113	40	0.05	23.08	12.66	17.70	17.50

N.A. - not available or not calculated.

Division total includes all occupations but only occupations passing confidentiality are shown.

**SIC: 903 LOCAL GOVERNMENT**

Benchmark Employment: 80,570

Total Number of Respondents: 79

Reference Date: May 12, 1994

Occupation		Employment	Per. of Total Employ.	Relative Error (in %)	Est. Reporting Occ. (%)	Mean Wage (\$)	Median Wage (\$)
ADMINISTRATIVE MANAGERS .....	130143	550	0.68	41.34	25.32	19.60	21.70
ENGINEERING, MATHEMATICAL & NATURAL SCIENCES MANAGERS .....	130173	110	0.14	10.62	18.99	27.40	27.50
COMMUNICATIONS/TRANSPORTATION & UTILITIES MANAGERS .....	150233	360	0.45	22.53	29.11	19.90	19.60
OTHER SERVICES MANAGERS .....	150993	670	0.83	N.A.	N.A.	14.80	12.10
CHIEF EXECUTIVES, LEGISLATORS & PUBLIC ADMINISTRATORS .....	190023	1,180	1.46	35.82	48.10	9.20	4.90
ALL OTHER MANAGERS & ADMINISTRATORS .....	199993	2,620	3.25	N.A.	N.A.	18.60	18.00
PROFESSIONAL/PARAPROFESSIONAL & TECHNICAL OCCUPATIONS .....	200003	18,500	22.97	N.A.	N.A.	13.00	12.60
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPECIALISTS .....	211003	520	0.65	N.A.	N.A.	12.90	12.60
ACCOUNTANTS & AUDITORS .....	211143	430	0.53	16.58	31.65	12.40	12.10
BUDGET ANALYSTS .....	211173	30	0.04	0.00	12.66	17.70	14.60
OTHER FINANCIAL SPECIALISTS .....	211993	60	0.07	N.A.	N.A.	13.70	13.70
PURCHASING AGENTS .....	213083	100	0.12	19.59	25.32	13.40	13.30
PERSONNEL, TRAINING & LABOR RELATIONS SPECIALISTS .....	215113	340	0.42	7.08	22.78	12.00	11.10
MANAGEMENT ANALYSTS .....	219053	10	0.01	0.00	6.33	18.80	20.00
CONSTRUCTION & BUILDING INSPECTORS .....	219083	610	0.76	29.82	37.97	13.10	13.20
COMPLIANCE OFFICERS, EXCEPT CONSTRUCTION .....	219113	400	0.50	9.24	29.11	12.80	13.10
TAX EXAMINERS, COLLECTORS & REVENUE AGENTS .....	219143	410	0.51	30.94	24.05	9.60	8.60
ASSESSORS .....	219173	320	0.40	39.50	18.99	10.70	9.80
ALL OTHER MANAGEMENT SUPPORT ...	219993	290	0.36	N.A.	N.A.	14.40	13.50
ENGINEERS .....	221003	320	0.40	N.A.	N.A.	20.00	19.40
CIVIL ENGINEERS, INCLUDING TRAFFIC .....	221213	190	0.24	8.84	20.25	20.30	19.70
ELECTRICAL & ELECTRONIC ENG. ....	221263	20	0.02	36.51	3.80	19.50	19.00
ALL OTHER ENGINEERS .....	221993	110	0.14	N.A.	N.A.	19.60	18.80
OTHER ARCHITECTS, SURVEYING & MAPPING SCIENTISTS .....	223993	370	0.46	N.A.	N.A.	17.30	16.50
ENGINEERING & RELATED TECHNICIANS & TECHNOLOGISTS .....	225003	890	1.10	N.A.	N.A.	13.10	12.90
CIVIL ENGINEERING TECHNICIANS & TECHNOLOGISTS .....	225023	80	0.10	18.95	13.92	14.30	13.70
DRAFTERS .....	225143	130	0.16	8.03	16.46	13.10	13.50
SURVEYING & MAPPING TECHNICIANS & TECHNOLOGISTS .....	225213	80	0.10	22.76	13.92	10.70	9.90
OTHER ENGINEERING & RELATED TECHNICIANS & TECHNOLOGISTS .....	225993	600	0.74	N.A.	N.A.	13.30	12.90

N.A. - not available or not calculated.

Division total includes all occupations but only occupations passing confidentiality are shown.

**SIC: 903 LOCAL GOVERNMENT**

Benchmark Employment: 80,570  
Reference Date: May 12, 1994

Total Number of Respondents: 79

Occupation		Employ- ment	Per. of Total Employ.	Relative Error (in %)	Est. Reporting Occ. (%)	Mean Wage (\$)	Median Wage (\$)
PHYSICAL SCIENTISTS .....	241003	90	0.11	N.A.	N.A.	15.40	14.30
CHEMISTS, EXCEPT BIOCHEMISTS .....	241053	80	0.10	13.92	11.39	15.70	14.40
ALL OTHER PHYSICAL SCIENTISTS.....	241993	10	0.01	N.A.	N.A.	13.00	13.10
LIFE SCIENTISTS .....	243003	100	0.12	N.A.	N.A.	12.40	11.90
FORESTERS & CONSERVATION							
SCIENTISTS.....	243023	20	0.02	0.00	6.33	13.60	13.10
AGRICULTURAL & FOOD SCIENTISTS..	243053	20	0.02	38.30	6.33	12.40	12.30
BIOLOGICAL SCIENTISTS .....	243083	60	0.07	38.18	5.06	11.90	10.80
COMPUTER SCIENTISTS & RELATED .....	251003	430	0.53	N.A.	N.A.	16.20	15.90
SYSTEMS ANALYSTS .....	251023	70	0.09	0.00	16.46	20.50	19.60
DATA BASE ADMINISTRATORS .....	251033	40	0.05	22.93	20.25	19.30	18.20
COMPUTER SUPPORT SPECIALISTS....	251043	80	0.10	8.48	24.05	15.90	14.30
COMPUTER PROGRAMMERS.....	251053	230	0.29	13.16	21.52	14.90	14.80
COMPUTER PROGRAMMER AIDES.....	251083	10	0.01	0.00	5.06	9.40	9.50
SOCIAL SCIENTISTS, INCLUDING							
URBAN & REGIONAL PLANNERS.....	271003	230	0.29	N.A.	N.A.	15.20	15.50
URBAN & REGIONAL PLANNERS.....	271053	210	0.26	27.23	21.52	14.60	14.80
ALL OTHER SOCIAL SCIENTISTS .....	271993	20	0.02	N.A.	N.A.	21.30	21.80
SOCIAL WORKERS, MEDICAL							
& PSYCHIATRIC .....	273023	130	0.16	46.14	6.33	10.70	8.80
SOCIAL WORKERS, EXCEPT							
MEDICAL & PSYCHIATRIC .....	273053	300	0.37	9.58	8.86	16.20	17.50
RECREATION WORKERS.....	273113	640	0.79	18.99	22.78	8.50	8.00
LAWYERS & RELATED WORKERS.....	281003	970	1.20	N.A.	N.A.	17.20	15.60
JUDGES & MAGISTRATES.....	281023	90	0.11	20.99	13.92	14.00	6.30
LAWYERS.....	281083	880	1.09	25.45	40.51	17.50	15.90
LEGAL ASSISTANTS/TECHNICIANS .....	283003	1,300	1.61	N.A.	N.A.	10.20	10.30
OTHER LEGAL ASSISTANTS							
& TECHNICIANS .....	283993	1,300	1.61	N.A.	N.A.	10.20	10.30
INSTRUCTORS, VOCATIONAL .....	313143	10	0.01	0.00	3.80	16.80	16.00
OTHER LIBRARIANS/ARCHIVISTS							
& CURATORS.....	315993	730	0.91	N.A.	N.A.	13.40	13.10
HEALTH PRACTITIONERS,							
TECHNICIANS & TECHNOLOGISTS.....	320003	7,290	9.05	N.A.	N.A.	12.70	13.00
THERAPISTS.....	323003	30	0.04	N.A.	N.A.	9.40	9.30
REGISTERED NURSES.....	325023	1,780	2.21	40.79	26.58	14.00	14.00
LICENSED PRACTICAL NURSES .....	325053	490	0.61	42.41	16.46	7.30	7.10
EMERGENCY MEDICAL TECHNICIANS .	325083	4,350	5.40	45.83	17.72	13.10	13.60
OTHER HEALTH PROFESSIONALS,							
PARAPROFESSIONALS/TECHNICIANS.	329993	640	0.79	N.A.	N.A.	11.30	10.30
PUBLIC RELATIONS SPECIALISTS							
& PUBLICITY WRITERS .....	340083	80	0.10	36.51	16.46	10.00	9.90
OTHER PROFESSIONAL,							
PARAPROFESSIONAL/TECHNICIANS.....	399993	1,620	2.01	N.A.	N.A.	13.00	13.20
SALES & RELATED OCCUPATIONS.....	400003	450	0.56	N.A.	N.A.	8.50	6.40

N.A. - not available or not calculated.

Division total includes all occupations but only occupations passing confidentiality are shown.

**SIC: 903 LOCAL GOVERNMENT**

Benchmark Employment: 80,570  
Reference Date: May 12, 1994

Total Number of Respondents: 79

Occupation	Employment	Per. of Total Employ.	Relative Error (in %)	Est. Reporting Occ. (%)	Mean Wage (\$)	Median Wage (\$)
<b>FIRST LINE SUPERVISORS, SALES &amp; RELATED</b> ..... 410023	30	0.04	0.00	5.06	12.20	10.10
<b>SALES WORKERS, SERVICES</b> ..... 430003	120	0.15	N.A.	N.A.	12.90	13.80
<b>APPRAISERS, REAL ESTATE</b> ..... 430113	120	0.15	19.28	6.33	12.90	13.80
<b>CASHIERS</b> ..... 490233	120	0.15	10.58	16.46	7.70	7.50
<b>ALL OTHER SALES &amp; RELATED</b> ..... 499993	180	0.22	N.A.	N.A.	5.60	5.50
<b>CLERICAL &amp; ADMIN SUPPORT</b> ..... 500003	15,300	18.99	N.A.	N.A.	9.20	8.60
<b>FIRST LINE SUPERVISORS, CLERICAL &amp; ADMINISTRATIVE</b> ..... 510023	1,070	1.33	7.83	48.10	14.30	14.30
<b>COURT CLERKS</b> ..... 537023	190	0.24	15.95	26.58	10.30	9.90
<b>LICENSE CLERKS</b> ..... 537083	100	0.12	46.99	10.13	10.10	9.70
<b>SECRETARIES, EXCEPT LEGAL &amp; MEDICAL</b> ..... 551083	2,430	3.02	22.33	69.62	9.70	9.80
<b>RECEPTIONISTS &amp; INFORM CLERKS</b> ..... 553053	630	0.78	3.73	29.11	8.00	7.80
<b>TYPISTS, INCL WORD PROCESSING</b> ..... 553073	620	0.77	11.95	16.46	8.80	9.00
<b>PERSONNEL CLERKS, EXCEPT PAYROLL &amp; TIMEKEEPING</b> ..... 553143	30	0.04	0.00	7.59	12.20	12.60
<b>FILE CLERKS</b> ..... 553213	80	0.10	5.52	10.13	8.10	8.00
<b>BOOKKEEPING, ACCOUNTING &amp; AUDITING CLERKS</b> ..... 553383	850	1.06	14.52	58.23	9.50	9.40
<b>PAYROLL &amp; TIMEKEEPING CLERKS</b> ..... 553413	80	0.10	27.47	29.11	10.40	10.30
<b>BILLING, COST &amp; RATE CLERKS</b> ..... 553443	120	0.15	17.83	16.46	8.20	8.10
<b>GENERAL OFFICE CLERKS</b> ..... 553473	3,320	4.12	14.62	58.23	7.50	7.30
<b>OFFICE MACHINE OPERATORS, DATA PROCESSORS</b> ..... 560003	450	0.56	N.A.	N.A.	9.30	8.70
<b>COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT</b> ..... 560113	200	0.25	25.42	27.85	9.40	8.20
<b>DATA ENTRY KEYERS, EXCEPT COMPOSING</b> ..... 560173	180	0.22	12.14	17.72	9.30	9.20
<b>OTHER OFFICE MACHINE OPERS</b> ..... 560993	70	0.09	N.A.	N.A.	8.90	9.10
<b>SWITCHBOARD OPERATORS</b> ..... 571023	70	0.09	15.25	18.99	7.40	6.80
<b>MAIL CLERKS, EXCEPT MACHINE OPERATORS</b> ..... 573023	30	0.04	0.00	12.66	8.40	8.20
<b>MESSENGERS</b> ..... 573113	10	0.01	0.00	6.33	9.00	8.80
<b>MATERIAL RECORDING/SCHEDULING/ DISPATCHING/DISTRIBUTING</b> ..... 580003	2,060	2.56	N.A.	N.A.	9.60	8.90
<b>DISPATCHERS, POLICE, FIRE &amp; AMBULANCE</b> ..... 580023	1,540	1.91	11.48	43.04	9.30	8.60
<b>DISPATCHERS, EXCEPT POLICE, FIRE &amp; AMBULANCE</b> ..... 580053	60	0.07	0.00	11.39	12.40	12.10
<b>METER READERS, UTILITIES</b> ..... 580143	200	0.25	17.72	15.19	10.70	10.50
<b>STOCK CLERKS, STOCKROOM, WAREHOUSE OR STORAGE YARD</b> ..... 580233	230	0.29	11.74	20.25	10.10	9.50
<b>OTHER MATERIAL RECORDING, SCHEDULING &amp; DISTRIBUTING</b> ..... 580993	30	0.04	N.A.	N.A.	10.10	9.90

N.A. - not available or not calculated.

Division total includes all occupations but only occupations passing confidentiality are shown.

**SIC: 903 LOCAL GOVERNMENT**

Benchmark Employment: 80,570  
Reference Date: May 12, 1994

Total Number of Respondents: 79

Occupation		Employ- ment	Per. of Total Employ.	Relative Error (in %)	Est. Reporting Occ. (%)	Mean Wage (\$)	Median Wage (\$)
ALL OTHER CLERICAL							
& ADMINISTRATIVE SUPPORT .....	599993	3,160	3.92	N.A.	N.A.	8.70	8.10
SERVICE OCCUPATIONS .....							
FIRE FIGHTING & PREVENTION SUPV .	10023	1,190	1.48	13.34	27.85	20.10	20.70
POLICE & DETECTIVE SUPERVISORS ..	610053	1,500	1.86	10.45	41.77	20.40	21.10
OTHER SERVICE SUPERVISORS .....	610993	300	0.37	N.A.	N.A.	12.20	12.50
FIRE INSPECTORS.....	630023	150	0.19	28.87	18.99	17.30	17.30
FIRE FIGHTERS .....	630083	4,720	5.86	18.94	29.11	14.70	14.10
POLICE DETECTIVES.....	630113	660	0.82	7.80	22.78	17.50	17.50
POLICE PATROL OFFICERS.....	630143	5,200	6.46	5.23	39.24	14.80	14.60
CORRECTION OFFICERS & JAILERS.....	630173	1,410	1.75	12.83	21.52	9.40	9.10
PARKING ENFORCEMENT OFFICERS.....	630213	100	0.12	30.54	12.66	8.60	8.20
BAILIFFS.....	630233	210	0.26	18.30	20.25	8.30	8.90
SHERIFFS & DEPUTY SHERIFFS.....	630323	1,250	1.55	15.21	17.72	10.10	9.80
CROSSING GUARDS .....	630443	240	0.30	39.99	11.39	7.80	5.00
GUARDS & WATCH GUARDS .....	630473	260	0.32	14.70	11.39	8.40	8.00
OTHER PROTECTIVE SERVICE.....	630993	1,240	1.54	N.A.	N.A.	9.00	9.10
FOOD, BEVERAGE PREPARATION							
& SERVICE WORKERS.....	650003	370	0.46	N.A.	N.A.	6.20	5.00
COOKS, INSTITUTION							
OR CAFETERIA .....	650283	140	0.17	32.53	12.66	8.40	6.40
OTHER FOOD SERVICE WORKERS .....	650993	230	0.29	N.A.	N.A.	5.00	4.70
HEALTH SERVICE & RELATED .....							
MEDICAL ASSISTANTS .....	660003	2,020	2.51	N.A.	N.A.	5.90	4.90
OTHER HEALTH SERVICE .....	660053	60	0.07	16.43	5.06	9.30	9.80
OTHER HEALTH SERVICE .....	660993	1,960	2.43	N.A.	N.A.	5.80	4.90
CLEANING & BUILDING SERVICE .....	670003	1,350	1.68	N.A.	N.A.	7.10	6.70
AMUSEMENT & RECREATION							
ATTENDANTS.....	680143	570	0.71	23.46	16.46	6.60	5.40
ALL OTHER SERVICE WORKERS.....	699993	2,170	2.69	N.A.	N.A.	5.40	4.80
AGRICULTURAL, FORESTRY,							
FISHING & RELATED .....	700003	540	0.67	N.A.	N.A.	11.50	10.80
ANIMAL CARETAKERS .....	790173	130	0.16	13.78	11.39	9.70	10.10
ALL OTHER AGRICULTURAL,							
FORESTRY & FISHING WORKERS.....	799993	410	0.51	N.A.	N.A.	12.10	11.20
PRODUCT/CONSTRUCT/OPERATE							
MAINTENANCE/MATERIAL							
HANDLING .....	800003	14,930	18.54	N.A.	N.A.	10.80	10.20
FIRST LINE SUPERVISORS-PRODUCT/							
CONSTRUCT/MAINTEN/RELATED .....	810003	1,140	1.42	N.A.	N.A.	16.00	16.40
FIRST LINE SUPERVISORS, MECHANICS/							
INSTALLERS/REPAIRERS.....	810023	530	0.66	24.82	31.65	16.90	17.40
FIRST LINE SUPERVISORS,							
TRADES & EXTRACTIVE .....	810053	170	0.21	21.23	13.92	15.20	14.60

N.A. - not available or not calculated.

Division total includes all occupations but only occupations passing confidentiality are shown.

**SIC: 903 LOCAL GOVERNMENT**

Benchmark Employment: 80,570  
Reference Date: May 12, 1994

Total Number of Respondents: 79

Occupation	Employment	Per. of Total Employ.	Relative Error (In %)	Est. Reporting Occ. (%)	Mean Wage (\$)	Median Wage (\$)
FIRST LINE SUPERVISORS, TRANSPORT/MOVING MACHINES..... 810113	100	0.12	23.36	17.72	14.40	14.20
OTHER FIRST LINE SUPERVISORS, PRODUCT/CONSTRUCT/MAINTAIN..... 810993	340	0.42	N.A.	N.A.	15.30	15.00
INSPECTORS & RELATED..... 830003	130	0.16	N.A.	N.A.	12.30	11.50
OTHER INSPECTORS, TESTERS & RELATED WORKERS..... 830993	130	0.16	N.A.	N.A.	12.30	11.50
MECHANICS, INSTALLERS & REPAIR..... 850003	4,650	5.77	N.A.	N.A.	10.50	10.00
MACHINERY MAINTENANCE MECH, WATER/POWER PLANT..... 851183	760	0.94	18.23	22.78	12.40	12.90
OTHER MACHINERY MAINTENANCE MECHANICS..... 851193	110	0.14	N.A.	N.A.	14.70	14.40
MAINTENANCE REPAIRERS, GENERAL UTILITY..... 851323	2,590	3.22	30.62	40.51	8.90	8.20
AUTOMOTIVE MECHANICS..... 853023	300	0.37	8.43	26.58	11.80	11.40
BUS & TRUCK MECHANICS & DIESEL ENGINE SPECIALISTS..... 853113	140	0.17	16.03	11.39	13.40	13.10
MOBILE HEAVY EQUIPMENT MECHANICS, EXCERTE ENGINES..... 853143	130	0.16	14.02	8.86	13.70	13.90
HEATING/AIR CONDITIONING/ REFRIGERATION MECHANICS..... 859023	20	0.02	0.00	6.33	13.50	13.80
ELECTRIC METER INSTALLERS, & REPAIRERS..... 859113	140	0.17	47.58	11.39	10.70	10.50
MECHANICAL CONTROL & VALVE INSTALLERS & REPAIRERS..... 859283	120	0.15	9.44	3.80	12.00	10.80
OTHER MECHANICS, INSTALLERS, & REPAIRERS..... 859993	340	0.42	N.A.	N.A.	12.70	12.90
CONSTRUCTION TRADE WORKERS, EXCEPT MATERIAL MOVING..... 870003	3,060	3.80	N.A.	N.A.	10.10	9.30
CARPENTERS..... 871023	70	0.09	32.12	13.92	9.80	9.70
ELECTRICIANS..... 872023	260	0.32	41.40	17.72	13.90	13.10
PLUMBERS, PIPEFITTERS & STEAMFITTERS..... 875023	20	0.02	0.00	5.06	14.40	12.40
PAVING, SURFACING & TAMPING EQUIPMENT OPERATORS..... 877083	200	0.25	36.38	7.59	8.40	8.00
HWY MAINTENANCE WORKERS..... 877113	2,040	2.53	19.39	35.44	9.50	8.80
OTHER CONSTRUCTION & EXTRACTIVE EXCEPT HELPERS..... 879993	470	0.58	N.A.	N.A.	11.40	11.40
PRECISION PRODUCTION OCCUP..... 890003	20	0.02	N.A.	N.A.	11.40	11.10
MACHINE SETTERS, OPERATORS..... 910003	440	0.55	N.A.	N.A.	9.70	9.00
PLANT & SYSTEM WORKERS..... 950003	1,740	2.16	N.A.	N.A.	13.30	13.20
WATER/LIQUID WASTE TREATMENT PLANT & SYSTEM OPERATORS..... 950023	1,070	1.33	10.27	30.38	12.50	12.70
POWER PLANT OPERATORS, EXCEPT AUXILIARY EQUIPMENT..... 950213	390	0.48	37.47	7.59	14.20	13.70
OTHER PLANT & SYSTEM OPER..... 950993	280	0.35	N.A.	N.A.	14.70	14.60

N.A. - not available or not calculated.

Division total includes all occupations but only occupations passing confidentiality are shown.

**SIC: 903 LOCAL GOVERNMENT**

Benchmark Employment: 80,570

Total Number of Respondents: 79

Reference Date: May 12, 1994

Occupation		Employ- ment	Per. of Total Employ.	Relative Error (in %)	Est. Reporting Occ. (%)	Mean Wage (\$)	Median Wage (\$)
MOTOR VEHICLE OPERATORS.....	971003	580	0.72	N.A.	N.A.	8.70	8.70
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER.....	971023	280	0.35	29.04	15.19	8.80	8.50
TRUCK DRIVERS-LIGHT, INCLUDE DELIVERY/ROUTE WORKERS .....	971053	180	0.22	31.88	10.13	8.60	9.30
BUS DRIVERS, EXCEPT SCHOOL .....	971083	120	0.15	4.90	6.33	8.80	8.60
ALL OTHER TRANSPORTATION & RELATED WORKERS .....	978993	260	0.32	N.A.	N.A.	7.70	7.60
MATERIAL MOVING EQUIPMENT OPERATORS.....	979003	1,180	1.46	N.A.	N.A.	10.50	10.20
INDUSTRIAL TRUCK & TRACTOR OPERATORS.....	979473	120	0.15	23.05	5.06	8.30	8.10
OPERATING ENGINEERS.....	979563	1,060	1.32	36.74	21.52	10.70	10.50
HELPERS, LABORERS & MATERIAL MOVERS, HAND.....	980003	1,670	2.07	N.A.	N.A.	8.00	7.30
HELPERS, MECHANIC & REPAIRER.....	981023	140	0.17	12.55	11.39	9.40	9.90
REFUSE & RECYCLABLE MATERIAL COLLECTORS.....	987053	190	0.24	31.57	7.59	10.80	10.80
OTHER HELPERS, LABORERS & MATERIAL MOVERS, HAND .....	989993	1,340	1.66	N.A.	N.A.	7.50	6.50
OTHER PRODUCT/CONSTRUCT/ MAINTENANCE/MATERIAL HANDLING..	999993	60	0.07	N.A.	N.A.	14.20	13.50

N.A. - not available or not calculated.

Division total includes all occupations but only occupations passing confidentiality are shown.



# Appendix A

## DESCRIPTIONS OF SELECTED OCCUPATIONAL GROUPS

**Managers and Administrative Occupations** - Include in this division top and middle-level managers, administrators, and executives. Primary duties are policy making, planning, staffing, directing or controlling the activities of industrial, commercial, governmental or other establishments. Include only managers and administrators who are exempt from the minimum wage and overtime provision of the Fair Labor Standards Act. Exclude owners and partners of unincorporated firms.

**Professional, Paraprofessional, and Technical Occupations** - Include in this division persons concerned with the theoretical or practical aspects of such fields as science, art, education, law and business relations where substantial post-secondary educational preparation, or equivalent on-the-job training or experience is required.

**Sales and Related Occupations** - Include in this division persons selling goods or services directly related to sales.

**Clerical and Administrative Support Workers** - Include in this division persons performing office and plant clerical tasks, such as typing, filing, computer operating, record keeping (personnel, stock, production, billing, etc.), and mail preparation and distributing.

**Service Occupations** - Include in this division workers in occupations relating to protective service, food service, health assisting service, cleaning and building service, and personal service.

**Agricultural, Forestry, Fishing, and Related Occupations** - Include in this Division workers concerned with agricultural production, forestry, and fishing. Also included in this division are agriculture related workers such as animal caretakers and groundskeepers.

**Production, Construction, Operating, Maintenance, and Material Handling Occupations** - Include in this Division all skilled, semiskilled, and unskilled workers performing machine and manual tasks involving production, construction, operating, maintenance, repair, and material handling operations.



## **Appendix B**

### **METHODOLOGY**

The 1994 survey of State and Local Government and Educational Services began the fourth quarter of 1993 with receipt of sampling tables from the Bureau of Labor Statistics (BLS).

Using these tables and the second quarter 1993 ES-202; the computer chose 194 units in Educational Services, 96 units in Local Government and the universe of 126 units in State Government.

State and Local Government survey excluded educational institutions and hospitals, which are surveyed separately.

The survey forms were provided by BLS and the initial mailing to the sample units was in April 1994. By September 1994, all units that had not responded had received a reminder post card. Following a reasonable time after the reminder cards were mailed; selected units received personal phone contacts from our office to encourage their response.

Respondents were to include:

- 1) full or part-time paid workers;
- 2) workers on paid vacation or other types of leave;
- 3) workers on unpaid short term absences;
- 4) salaried officers, executives, and staff of incorporated firms;
- 5) employees temporarily assigned to other units;
- 6) employees for whom the unit was their permanent assignment whether paid by the unit or not.

They were not to include:

- 1) proprietors, owners, and partners of unincorporated firms;
- 2) unpaid family workers;
- 3) workers on extended leave.

Each employee was to be listed only once. If a worker did more than one job, he was to be classified in the occupation which required the highest level of skill. If the skill levels were the same, the worker was to be recorded in the job in which he spent the most time.

The returned survey forms were screened for errors such as incorrect industry description or an unusual occupational pattern. Any problems were resolved by telephoning the person who had completed the survey form.

The final results were:

### **EDUCATIONAL SERVICES**

	<u>Units</u>	<u>Employment</u>
Sample	194 - 100.0%	88,527 - 100.0%
Usable	135 - 69.6%	50,052 - 56.5%
Refusals	27 - 13.9%	21,147 - 23.9%
Out of Business	5 - 2.6%	80 - 0%
Note in Scope of the Survey	2 - 1.0%	29 - 0%
Nonrespondents	25 - 12.9%	17,219 - 19.5%

### **STATE GOVERNMENT**

	<u>Units</u>	<u>Employment</u>
Sample	126 - 100.0%	46,170 - 100.0%
Usable	125 - 99.2%	46,068 - 99.8%
Refusals	0 - 0%	0 - 0%
Out of Business	0 - 0%	0 - 0%
Out of Scope	1 - .8%	102 - .2%
Nonrespondents	0 - 0%	0 - 0%

### **LOCAL GOVERNMENT**

	<u>Units</u>	<u>Employment</u>
Sample	96 - 100.0%	42,312 - 100.0%
Usable	81 - 84.4%	28,498 - 67.4%
Refusals	1 - 1.0%	0 - 0%
Out of Business	0 - 0%	7,734 - 18.3%
Out of Scope	0 - 0%	0 - 0%
Nonrespondents	14 - 14.6%	6,080 - 14.4%

## Appendix C

### LIMITATIONS OF THE DATA

There are two sources of error in the survey, sampling error and non-sampling error.

**Sampling Error** - The occupational estimates in this publication were based on a sample of employers in certain industries. Sampling error occurs when a sample is taken, as opposed to a census of all employers in these industries. Sampling error, then, is the difference between data obtained from a sample and data which would have been obtained if the same survey methods were used to collect identical information from all employers.

This type of error can be calculated. The relative error (sampling error) is such that the chances are two out of three that the results of a census would not differ by more than the percent relative error shown. For example, if it is estimated that a certain occupation has an employment of 100 and the relative error is 10 percent, then the chances are two out of three (actually 68 out of 100) that the true number in the occupation is between 90 and 110. The chances are 95 out of 100 that the true number in the occupation is between 80 and 120.

**Non-sampling Error** - The results of the survey are subject to non-sampling errors for which there are no measures available. These errors arise because of nonresponse, inadequate survey design and coverage, human error, etc.

Frequently, problems arise because no survey form could list all the occupations that might be found in an industry without being extremely lengthy and impractical to use. This means that employers and/or the OES staff must use the residual or "all other" category for workers that do not fit into any of the listed occupations.

For firms with only a few employees, any one individual may work in several different occupations. Classifying the employee into the occupation with the highest skill level or into the occupation in which he or she spends the most time is, many times, strictly a matter of chance.

The causes of these and other non-sampling errors have been given considerable attention. Control procedures have been carefully followed in an attempt to minimize their impact.



## Appendix D

Publications produced by and available through the Missouri Department of Labor and Industrial Relations, Research and Analysis Section, P. O. Box 59, Jefferson City, MO 65104-0059, which may be of interest to users of this staffing pattern report include:

<u>Title</u>	<u>Coverage</u>	<u>Published</u>	<u>Description</u>
Labor Market Information for Affirmative Action	State, Metro Areas, Counties	Annually In October	Population and labor force data by sex and minority status; employment by occupational group including sex and minority status of workers; and occupational characteristics of job applicants at local Job Service offices.
Missouri Area Labor Trends	State, Metro Areas, County Data	Quarterly	Provides information on employment and unemployment. Some economic information is presented, primarily for the state and larger Metro Areas.
Employment Outlook	State, Some Metro Areas	Intermittently	Provides employment projections to 2005 by industry and occupation. Some analysis.
Staffing Patterns	State	Three year cycle by major industry group	Provides staffing patterns and wage data for selected two- and three-digit SICs. Most nonagricultural industries are covered.

